DU PONT

OPM 955

MATERIAL SAFETY DATA SHEET

Page 1 of 3

IDENTIFICATION
Name

Sodium Gyanide

Synonyms

Cyanide of Sodium CAS Name

CAS Name
Sodium Cyanide

I.D. Nos./Codes NIOSH Registry No. VZ 75250 Wiswesser Code NC-NA-

Manufacturer/Distributor

E. I. du Pont de Nemours & Co., (Inc.)

Address

Wilmington, DE 19898

HAZARDOUS COMPONENTS

Material(s)

Sodium Cyanide

PHYSICAL DATA

Boiling Point, 760 mm Hg 1496°C/2725°F Specific Gravity

1.6

Vapor Density

(Air = 1) 1.7

% Volatiles by Vol. 0

Form Solid Appearance Granular

pH Information
Not available

FIRE AND EXPLOSION DATA

Flash Point

Method

None

Flammable Limits in Air, % by Vol.

Not applicable

Fire and Explosion Hazards

Will not burn

Extinguishing Media

Not applicable

Special Fire Fighting Instructions Do not use water if involved in fire. Toxic water solutions may escape to surrounding areas. Contact with acids or acid salts will release highly toxic and flammable hydrogen cyanide gas.

Tradename:

Cyanobrik[®]/Cyanogran[®]

Chemical Family

Metal Cyanide CAS Registry No.

143-33-9

Formula:

NaCN

Product Information and Emergency Phone

(901) 357-1546

Transportation Emergency Phone

(800) 424-9300

Approximate %

100%

Melting Point

564°C/1047°F

Vapor Pressure

Not applicable

Solubility in H₂O

37% (at 20°C)

Evaporation Rate (Butyl Acetate = 1)

Not applicable

Color

Odor

White

Pungent

Octanol/Water Partition Coefficient

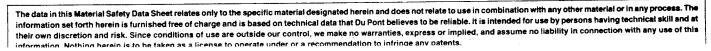
Not applicalbe

Autoignition Temperature

Not applicable

Lower

Upper



HAZARDOUS REACTIVITY

Instability

Will react with acids to liberate highly toxic and flammable hydrogen cyanide gas. Incompatibility

Decomposition

Polymerization

Will not occur

HEALTH HAZARD INFORMATION

Exposure Limits

OSHA Time Weighted Average (as CN) = 5 mg/m^3 .

Routes of Exposure and Effects

Highly toxic; may be rapidly fatal if swallowed or inhaled.

Causes eye burns.

May irritate skih.

Study and plan First Aid action before beginning work with cyanide --- See attached page 3.

PROTECTION INFORMATION

Ventilation

Use only with adequate ventilation.

Personal Protective Equipment Use respirator if there is danger of breathing dust; air or oxygen mask in emergencies.

Other Wear coverall chemical safety goggles and/or face shield. Rubber gloves for solutions. Dry cotton gloves for dry material.

DISPOSAL PROCEDURES

Aquatic Toxicity

Not available

Spill, Leak or Release Do not breathe dust or gas. Do not get in eyes. Avoid skin contact. Sweep up spillage and store in covered container pending transfer to disposal facility. Waste Disposal Comply with Federal, State and local regulations. Do not flush sodium cyanide into sewers which may contain an acid. If approved, neutralize with sodium or calcium hypochlorite and flush to waste treatment system or call disposal contractor.

SHIPPING PRECAUTIONS

Transportation

DOT Shipping Name = Sodium Cyanide, solid (or solution). DOT class = Poison B Shipping Containers 49 STCC Code = 4923228. UN No. 1689. IMCO Class 6.1. Railroad Flo-bins®. Drums.

Storage Conditions Store in dry place. Keep container closed and away from acids, weak alkaline salts and oxidizing agents. Do not store near foodstuffs.

REFERENCES AND ADDITIONAL INFORMATION

Do not breathe dust or gas. Do not get in eyes. Avoid contact with skin. carry foodstuffs, beverages or tobacco where contamination with cyanide is possible, Wash thoroughly after handling. Wash contaminated clothing before reuse.

Du Pont Bulletin on Sodium Cyanide

National Fire Protection Association Manual 49, 491M.

DATE: 6/79



PROTECTION INFORMATION

Ventilation

Good ventilation should be provided to keep dust and HCN gas below exposure limits.

Personal Protective Equipment

Recommended Minimum Protection - chemical splash goggles and rubber gloves (butyl preferred).

Have available and use as appropriate:

- Face shields; rubber suits, aprons, and boots.

- Disposable respirators (if dusty conditions exist).

- Self-contained breathing air supply (in case of emergency).

- HCN detector.

- First Aid and Medical Treatment supplies*, including oxygen resuscitators.
- * See Du Pont Sodium Cyanide Storage and Handling Bulletin for list of supplies.

DISPOSAL INFORMATION

Aquatic Toxicity

Highly toxic to marine life.

Spill, Leak or Release

Sweep up and shovel into a covered container or plastic bag pending transfer to a disposal facility. Keep spillage dry. Flush spill area with a dilute solution of sodium or calcium hypochlorite. Comply with Federal, State, and local regulations on reporting releases.

Waste Disposal

Comply with Federal, State, and local regulations. Do not flush cyanide into sewers which may contain an acid. Detoxify with sodium hypochlorite, or hydrogen peroxide; flush to waste water treatment system; or call a licensed disposal contractor.

E-66389 Date: 4/84

SHIPPING INFORMATION

Transportation

DOT Hazard Class.*: Poison B IMO Class.: 6.1

DOT Shipping Name*: Sodium Cyanide, Solid UN No.: 1689

NA No.:

RQ Quantity*: 10 1b/4.54 kg

Shipping Containers

"Wet-Flo" railcars and tank trucks; hopper railcars; Flo-Bins® (3000 lb net); 100 lb and 200 lb steel drums.

Storage Conditions

Store in properly labeled containers in dry, ventilated, secured areas. Keep containers closed and contents dry. Do not store with acids or acid salts, weak alkalis, or oxidizing agents. Do not handle or store food, beverages, or tobacco in cyanide areas. Do not store near combustibles or flammables because of cyanide solution run-off from water used for fire fighting.

*49 CFR 172.101, Hazardous Materials Table

ADDITIONAL INFORMATION AND REFERENCES

For further information, see Du Pont Sodium Cyanide Storage and Handling Bulletin.

E-66389

Date: 4/84

